

Supplementary Table S3

**Table S3.** Correlation matrix of 19 Bioclim variables and altitude

| Bioclim variables  | Code                  | Altitude | BIO1  | BIO2  | BIO3  | BIO4  | BIO5  | BIO6  | BIO7  | BIO8  | BIO9  | BIO10 | BIO11 | BIO12 | BIO13 | BIO14 | BIO15 | BIO16 | BIO17 | BIO18 | BIO19 |
|--|-----------------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Altitude   | Alt                   |          | -0.97 | 0.42  | -0.36 | 0.59  | -0.95 | -0.93 | 0.54  | -0.96 | -0.91 | -0.98 | -0.93 | -0.54 | -0.52 | -0.20 | -0.05 | -0.53 | -0.26 | -0.27 | -0.13 |
| Annual Mean Temperature - Bio1                                     | t_mean                |          |       | -0.38 | 0.51  | -0.72 | 0.95  | 0.98  | -0.63 | 0.95  | 0.97  | 0.98  | 0.99  | 0.56  | 0.56  | 0.15  | 0.11  | 0.56  | 0.24  | 0.25  | 0.13  |
| #Mean Diurnal Range (Mean of monthly (max temp - min temp)) - Bio2 | t_diurn               |          |       |       | -0.10 | 0.49  | -0.19 | -0.51 | 0.72  | -0.28 | -0.38 | -0.30 | -0.42 | -0.64 | -0.49 | -0.60 | 0.55  | -0.52 | -0.63 | -0.49 | -0.28 |
| #Isothermality (BIO2/BIO7) (x 100) - Bio3                          | t_iso                 |          |       |       |       | -0.85 | 0.31  | 0.60  | -0.73 | 0.40  | 0.54  | 0.35  | 0.62  | 0.47  | 0.44  | -0.08 | 0.09  | 0.44  | 0.04  | 0.21  | 0.18  |
| Temperature Seasonality (standard deviation x100) - Bio4           | (standard t_seas      |          |       |       |       |       | -0.49 | -0.82 | 0.94  | -0.57 | -0.74 | -0.55 | -0.82 | -0.70 | -0.65 | -0.16 | 0.04  | -0.66 | -0.27 | -0.39 | -0.20 |
| Max Temperature of Warmest Month- Bio5                             |                       |          |       |       |       |       |       | 0.87  | -0.37 | 0.93  | 0.91  | 0.99  | 0.89  | 0.36  | 0.40  | 0.05  | 0.22  | 0.39  | 0.11  | 0.05  | 0.07  |
| Min Temperature of Coldest Month - Bio6                            |                       |          |       |       |       |       |       |       | -0.77 | 0.90  | 0.96  | 0.92  | 0.99  | 0.64  | 0.62  | 0.22  | 0.02  | 0.62  | 0.32  | 0.31  | 0.19  |
| Temperature Annual Range (BIO5- BIO6) - Bio7                       | (BIO5- t_range        |          |       |       |       |       |       |       |       | -0.50 | -0.65 | -0.47 | -0.74 | -0.76 | -0.66 | -0.36 | 0.25  | -0.67 | -0.46 | -0.53 | -0.27 |
| Mean Temperature of Wettest Bio8                                   | Quarter - t_wetq      |          |       |       |       |       |       |       |       |       | 0.87  | 0.96  | 0.91  | 0.47  | 0.47  | 0.12  | 0.17  | 0.48  | 0.18  | 0.26  | 0.06  |
| Mean Temperature of Driest Bio9                                    | Quarter - t_dryq      |          |       |       |       |       |       |       |       |       |       | 0.93  | 0.97  | 0.55  | 0.56  | 0.14  | 0.10  | 0.56  | 0.24  | 0.20  | 0.18  |
| Mean Temperature of Warmest Bio10                                  | Quarter - t_warmq     |          |       |       |       |       |       |       |       |       |       |       | 0.93  | 0.44  | 0.46  | 0.13  | 0.15  | 0.46  | 0.19  | 0.16  | 0.10  |
| #Mean Temperature of Quarter - Bio11                               | Coldest t_coldq       |          |       |       |       |       |       |       |       |       |       |       |       | 0.62  | 0.61  | 0.16  | 0.09  | 0.61  | 0.25  | 0.29  | 0.16  |
| Annual Precipitation - Bio12                                       | ppt_ann               |          |       |       |       |       |       |       |       |       |       |       |       |       | 0.93  | 0.37  | -0.14 | 0.97  | 0.48  | 0.74  | 0.32  |
| Precipitation of Wettest Month - Bio13                             |                       |          |       |       |       |       |       |       |       |       |       |       |       |       |       | 0.19  | 0.11  | 0.99  | 0.30  | 0.61  | 0.36  |
| Precipitation of Driest Month - Bio14                              |                       |          |       |       |       |       |       |       |       |       |       |       |       |       |       |       | -0.54 | 0.23  | 0.93  | 0.42  | 0.25  |
| Precipitation Seasonality (Coefficient of Variation) - Bio15       | (Coefficient ppt_seas |          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 0.06  | -0.53 | -0.25 | -0.13 |
| #Precipitation of Wettest Bio16                                    | Quarter - ppt_wetq    |          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 0.34  | 0.67  | 0.32  |
| #Precipitation of Driest Bio17                                     | Quarter - ppt_dryq    |          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 0.49  | 0.29  |
| #Precipitation of Warmest Bio18                                    | Quarter - ppt_warmq   |          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | 0.05  |
| #Precipitation of Coldest Bio19                                    | Quarter - ppt_coldq   |          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

#Uncorrelated variables used to develop ecological niche model for each yew species distributed in HKH and adjacent regions.

Altitude, Bio1, Bio2, Bio3, Bio4, Bio7, Bio8, Bio9, Bio10, Bio11, Bio12, Bio15, Bio16, Bio17, Bio18 and Bio19 were used to compare ecological niches among the three species following Broennimann et al. (2012).